The documentation and process conversion measures necessary to comply with this amendment shall be completed by 13 November 2001.

INCH-POUND

MIL-PRF-19500/486E
AMENDMENT 2
13 August 2001
SUPERSEDING
AMENDMENT 1
20 September 1998

PERFORMANCE SPECIFICATION

SEMICONDUCTOR DEVICE, COUPLER, OPTOELECTRIC, SOLID STATE;
TYPES 4N22, 4N22A, 4N23, 4N23A, 4N24, 4N24A, 4N22U, 4N22AU,
4N23U, 4N23AU, 4N24U, 4N24AU; JAN, JANTX, JANTXV, AND JANS

This amendment forms a part of MIL-PRF-19500/486E, dated 10 June 1997 and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

* 1.3.1 Total device ratings., delete second “1.3.1” and substitute “1.3.3”.

PAGE 2

* 1.4.2 Coupled (transfer) characteristics., delete second “1.4.2” and substitute “1.4.3”.

PAGE 9

* 4.3, screen table; delete and substitute:

"

Screen (see table IV of MIL-PRF-19500)	Measurement	
	JANS level	JANTX and JANTXV levels
3	See 4.3.1	See 4.3.1
(1) 9	$I_{C(OFF)}$, h_{FE}	$I_{C(OFF)}$, 100 percent read and record.
10	See 4.3.2	See 4.3.2
(2) 11	I_R, $I_{C(OFF)1}$, h_{FE} and $I_{C(ON)2}$; $\Delta I_{C(OFF)1}$ = 100 percent of initial value or 25 nA dc, whichever is greater. Δh_{FE} = ± 20 percent of initial reading.	I_R, $I_{C(OFF)1}$, h_{FE} and $I_{C(ON)2}$; $\Delta I_{C(OFF)1}$ = 100 percent of initial value or 25 nA dc, whichever is greater.
12	See 4.3.3	See 4.3.3
13	Subgroup 2 of table I herein; $\Delta I_{C(OFF)1}$ = 100 percent of initial value or 25 nA dc, whichever is greater. Δh_{FE} = ± 20 percent of initial reading. $I_{C(ON)}$ = ± 25 percent of initial reading; ΔI_R = 100 percent of initial value or 25 μA dc, whichever is greater.	Subgroup 2 of table I herein; $\Delta I_{C(OFF)1}$ = 100 percent of initial value or 25 nA dc, whichever is greater. Δh_{FE} = ± 20 percent of initial reading. $I_{C(ON)}$ = ± 25 percent of initial reading; ΔI_R = 100 percent of initial value or 25 μA dc, whichever is greater.

(1) Screen 9 may be omitted if $I_{C(OFF)1}$ in screen 11 is determined using the maximum limit of $I_{C(OFF)1} \leq 25$ nA (see screen 11).
(2) If screen 9 was omitted, $I_{C(OFF)1}$ maximum limit is 25 nA and $\Delta I_{C(OFF)1}$ is not required."

* 4.3.1 Power burn-in conditions., delete second "4.3.1" and substitute "4.3.3".

PAGE 10

* 4.4.2.1 Group B inspection, appendix E, table VIb (JANTX and JANTXV) of MIL-PRF-19500. title, delete "4.4.2.1" and substitute "4.4.2.2".

PAGE 12

TABLE I, subgroup 3; delete and substitute:

“

Subgroup 3						
High temperature operation:		T_A = +100°C				
(Transistor characteristics)						
Off-state collector current (phototransistor mode)	3041	Bias condition D; V_{CE} = 20 V dc; I_B = 0, I_F = 0 (see 4.5.3)	$I_{C(OFF)2}$		100	µA dc
(Coupler characteristics)						
On-state collector current 2/ (phototransistor mode)	3041	V_{CE} = 5 V dc; I_F = 10 mA dc	$I_{C(ON)3}$			mA dc
4N22, 4N22A 4N23, 4N23A 4N24, 4N24A				1.0 2.5 4.0		
(LED characteristics)						
Forward volltage	4011	I_F = 10 mA dc (see 4.5.2)	V_{F2}	0.7	1.2	V dc
Low temperature operation:		T_A = -55°C				
On-state collector current 2/ (phototransistor mode)	3041	V_{CE} = 5 V dc; I_F = 10 mA dc	$I_{C(ON)4}$			mA dc
4N22, 4N22A 4N23, 4N23A 4N24, 4N24A				1.0 2.5 4.0		
(LED characteristics)						
Forward volltage	4011	I_F = 10 mA dc (see 4.5.2)	V_{F3}	1.0	1.5	V dc

“

PAGE 13

TABLE I, subgroup 4, input to output internal resistance, method column; add “1016”.

The margins of this amendment are marked with an asterisk to indicate where changes from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:
Air Force - 11
NASA - NA
DLA - CC

Review activity:
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